

a1 AC7  
4. (Amended) The method according to claim 1 [claims 1 to 3] wherein a polymerase having additional 5'-3' exonuclease activity is used for the amplification of DNA, and an oligonucleotide probe labelled at the most 5' base with a fluorescent dye and at the most 3' base with a fluorescent quencher dye which hybridises within the target DNA is included in the amplification process; said labelled oligonucleotide probe being susceptible to 5'-3' exonuclease degradation by said polymerase to produce fragments that can be detected by fluorogenic detection methods.

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8. (Amended) The method according to claim 4 [claims 4 to 7] wherein the fluorescent reporter dye is 6-carboxy-fluorescein, tetrachloro-6-carboxy-fluorescein, or hexachloro-6-carboxy-fluorescein, and the fluorescent quencher dye is 6-carboxytetramethyl-rhodamine.

9. (Amended) The method according to claim 1 [claims 1 to 8] wherein the amplification process comprises 35 PCR cycles at a MgCl<sub>2</sub> concentration of 5.2 mmol, an annealing temperature of 55 °C and an extension temperature of 65 °C.

16. (Amended) A kit useful for diagnosing an enterobacteria infection in samples derived from a living animal body including a human, by TaqMan™-PCR method, said kit comprising:

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(a) a set of primer pair, wherein said primer pair allows differentiation of at least two different groups of pathogenic E. Coli strains by amplification of a virulence factor/toxin gene characteristic for the respective group of the pathogenic E. Coli strains; [ according to claims 10 to 12] and

(b) a set of oligonucleotide probes, wherein said set of oligonucleotide probes detect virulence factor/toxin genes of pathogenic E. Coli by TaqMan™-PCR [according to claims 13 to 15].

17. (Amended) The [ Use of the] method of claim 1, wherein said method [according to claims 1 to 9] is used to diagnose [for diagnosing] an enterobacteria infection in a sample derived from a living animal body [including a human, or for the detection of an enterobacteria contamination of consumable, such as meat, milk and vegetables].

Please add the following new claims:

18. The method of claim 17, wherein said sample is derived from a human.

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19 The method of claim 1, wherein said method is used to detect enterobacteria contamination of a consumable.

20. The method of claim 19, wherein said consumable is selected from the group consisting of meat, milk or vegetable.